any difference if a junior synonym or a junior homonym is threatened by an unused older name, prevailing usage must be maintained.

The first revision of the taxon *M. concolor* Ahl, 1937 was by Paepke (1991, 1994), not Freyhof & Herder (2002). Paepke (1994) treated *M. spechti* Schreitmüller, 1936 as a nomen oblitum (see Paepke, 2003). He rediscovered Schreitmüller's note (1936b) only in 2002 and brought it to our attention in 2003.

The distinction by Kottelat et al. between significant and insignificant cases and between economically important species and fish species kept in aquaria is completely beside the point, highly subjective and against the spirit of the Code (see Article 23.9 and Recommendation 23A). In spite of its moderate size, the black paradise fish, *M. concolor*, is regarded as an edible fish well known to the people in the vicinity of Hue, the old capital of Vietnam.

The paper by Herder & Freyhof (2002), which was published in an aquarium magazine, is by no means inappropriately listed in our bibliography. Why did they send this paper to press before the publication of their revision? Our list of titles using the name *Macropodus concolor* includes only publications widely distributed or relevant to the nomenclature of *M. concolor* Ahl, 1937, but there are dozens of additional titles in which only the name *M. concolor* is used.

If the examples of Freyhof & Herder (2002) and Kullander & Britz (2002) who used forgotten fish names from obscure sources become an accepted thing, the continuity of scientific nomenclature will be threatened. There are many examples of obscure publications using names which would be a threat to well-known fish taxa, particularly in German aquarium magazines published in the first half of the last century.

The aim of our request, which is supported by many specialists who have been concerned with the black paradise fish, is to promote the principle of nomenclatural stability. In contrast, Kottelat et al. (2004) adhered to the Principle of Priority at all costs. We, therefore, would like to strongly defend our proposal to protect the specific name of *Macropodus concolor* Ahl, 1937.

Comment on the proposed conservation of *Viverra maculata* Gray, 1830 (currently *Genetta maculata*; Mammalia, Carnivora)

(Case 3204; see BZN **60**: 45–47, **61**: 119–122)

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1. We agree that an application to conserve a junior primary homonym may be submitted to the Commission under Article 23.9.5 of the Code. Since Article 23.9.5 applies only to names in use, we need to ponder what exactly 'in use' means and consider the fact that *Viverra maculata* Gray, 1830 has been used so far by only a

minority of the authors concerned with the relevant taxa. Indeed, after Coetzee's (1967) reference to the homonymy of *V. maculata* and its status as an invalid senior synonym of *Genetta pardina* I. Geoffroy Saint-Hilaire, 1832 (the pardine genet), the usage of *V. maculata* Gray, 1830 for any genet species has not been prevalent (see Grubb, BZN **61**: 119–122). We think that, instead of using the specific name in question to identify a particular genet species, the authors of the application (BZN **60**: 46) should have waited for the Commission's ruling and maintained prevailing usage as stated in Article 82.

2. It appears that the main objective of the proposal to validate the name *Viverra maculata* Gray, 1830 is to use it for a genet species (the rusty-spotted genet) whose valid name is currently controversial. However, a list of arguments both in favour and against attributing *maculata* Gray, 1830 to the rusty-spotted genet is essentially absent. We regard this matter as critical, both for consideration of *maculata* as a valid name and for its assignment to the rusty-spotted genet. When stating our objections to Case 3204 and suggesting different alternative proposals for providing a valid name to the rusty-spotted genet, we will refer to Gaubert et al. (2003), where the present issue is discussed in more detail and the 'neotype' of *V. maculata* Gray, 1830 was designated.

3. The former usage of *Viverra maculata* Gray, 1830 for the rusty-spotted genet was mostly related to the acceptance of its conspecificity with the pardine genet and to the fact that *maculata* was regarded as the valid senior synonym of the latter (Schlawe, 1981). This view was followed by some ecologists (Fuller et al., 1990; Angelici et al., 1999; Angelici, 2000) and taxonomists (Wozencraft, 1993) who were not experts in the systematics of the genus *Genetta* or fully acquainted with the imbroglio under discussion here. Only recently has *maculata* Gray, 1830 been used to denote the rusty-spotted genet alone and, even then, only by the applicants of the Case (Gaubert et al., 2002; Gaubert, 2003). Previous usage of the name *maculata* for the rusty-spotted genet should not be invoked if we now know that such usage had been essentially mistaken. Moreover, the previous usage of *maculata* as a valid name for the pardine genet is a good argument for opposing its transfer to another species since it would be a source of confusion and justification for requesting its suppression.

4. We accept as pertinent the arguments presented by Gaubert et al. (2003) that the type locality and species identification traditionally assigned to the original illustration of *V. maculata* are uncertain, although a West Africa locality and identity with the species *G. pardina* has always been indicated in the literature. However, an important problem with the proposals is that although the original figured specimen may not represent a pardine genet from Senegal, it is possible that the specimen may indeed represent that species after all. Below we describe why Gray's drawing may represent equally well any of two or three species regarded as separate today and, in consequence, why *maculata* is a nomen dubium in the context of *Genetta* taxonomy, and hence subjectively invalid. In order to state that the original figured specimen *maculata* represents a rusty-spotted genet, the proposal relies only on the observation and interpretation of the illustration. This is because the type locality and type specimen are both unknown and the descriptions attached to the image do not provide for an accurate determination of the species. The 'diagnostic' character invoked by Gaubert et al. (2003) to ascribe the drawing by Gray to a rusty-spotted

genet is far from clear. Crawford-Cabral (1981) figured a specimen of *G. pardina* from Guinea-Bissau kept at the Zoology Centre of the Scientific Institute of Tropical Research (CZ-IICT) in Lisbon, Portugal (collection number 1945–340) that matches Gray's illustration for *maculata* perfectly well. In another pardine genet specimen from the same collection (number 1945–68) this situation is even clearer. The light colour of the limbs is usually accepted as the character state that distinguishes *G. pardina* from the rusty-spotted genet (Gaubert, 2003). However, considering the example given above, this difference does not seem to be universal and hence is not diagnostic but more just a question of degree or frequency. The original figure of *G. maculata* (Gray, 1830) may not represent a rusty-spotted genet but instead a pardine genet, as stated by Schwarz (1930), or even *G. genettoides* Temminck, 1853, a form of dubious taxonomic status but closely related to both pardine and rusty-spotted genets.

5. We cannot accept the neotype designation, which accompanies the intent to use *G. maculata* (Gray, 1830) as the species name of the rusty-spotted genet. We believe that some of the qualifying conditions in Article 75.3 are not met. In view of the points given in para. 4 above, the neotype designation does not clarify the taxonomic status of the nominal taxon (required in Article 75.3.1) since the characters in Gray's drawing which are supposed to differentiate the nominal taxon from other taxa are not diagnostic (as required in Article 75.3.2). Furthermore, when addressing Article 75.3.6, Gaubert et al. (2003) followed a series of apparently sensible criteria in suggesting a type locality, but do not address one important issue (see para. 6 below). The taxonomic status of the rusty-spotted genets described from the region of the proposed type locality (*Genetta matschiei* Neumann, 1902, *G. schraderi* Matschie, 1902 and *G. deorum* Funaiolo & Simonetta, 1960) should have been assessed prior to designation of a neotype. If one or more of the nominal species in question are not conspecific with the neotype, then that neotype does not represent the whole of what we colloquially call rusty-spotted genets. If the authors of the Case had followed Recommendation 75B of the Code they would have been aware of the serious objection from other *Genetta* specialists to the neotype designation.

6. There is a problem in assigning *maculata* or any other name to the rusty-spotted genet at the moment. It fails to acknowledge the potential occurrence of more than one species within an assemblage which is clearly polytypic, reflected in the 17 names given to forms of the rusty-spotted genet (listed in Crawford-Cabral, 1981), most regarded as subspecies and distributed across a vast range of heterogeneous habitats. For instance, Crawford-Cabral & Fernandes (2001) have found evidence supporting the existence of three morphological species of rusty-spotted genets in Southern Africa alone. It is indeed possible that the rusty-spotted genets constitute a superspecies and then, since superspecies are not to be given formal nomenclatural recognition (Mayr, 1969), the search for a single valid name for this group of forms is a false quest. The conspecificity of some or all of the described forms of rusty-spotted genet, and consequently the synonymy of the corresponding names, has not been established. The uncertainty about speciation within the rusty-spotted genets, together with the absence of information other than morphological data for this species, suggests that it would be more advisable to wait for additional data before deciding upon such a difficult nomenclatural issue. At the moment we are undertaking DNA-based research on the population structure, phylogeography,

and putative speciation within the rusty-spotted genets. The results, when put together with the extensive available morphological data, will allow a much more comprehensive and sound decision on the systematics of the species.

7. Schlawe (1980) discovered that the type specimen of *Genetta rubiginosa* Pucheran, 1855, the name traditionally given to the rusty-spotted genets, following Roberts (1951) and Crawford-Cabral (1966), is an individual of a completely different species, *G. thierryi* Matschie, 1902. This led Crawford-Cabral & Fernandes (1999) to recommend a search for a new scientific name for the rusty-spotted genets, eventually following Article 23.3.5, but they warned that a thorough investigation was necessary, as outlined in para. 6 above, before making a decision. We follow the same line of reasoning here and furthermore state that we will have, in the very near future, results from our current research that we believe will be central to the rusty-spotted genet's taxonomy. This approach is the soundest in terms of taxonomy as well as for nomenclatural stability in this variable group of genets.

8. We strongly recommend that the Commission reject the proposals published in BZN **60**: 46. We also agree with Grubb (BZN **61**: 120) that the neotype designation by Gaubert et al. (2003) is invalid under Article 75.3 of the Code.

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Additional references

Coetzee, C. 1967. Carnivora (excluding the family Felidae). Part 7, pp. 1–70 *in* Meester, J. (Ed.), *Preliminary identification manual for African mammals.* Smithsonian Institution, Washington D.C.

Crawford-Cabral, J. 1966. Note on the taxonomy of *Genetta. Zoologica Africana*, **2**(1): 25–26.

Crawford-Cabral, J. & Fernandes, C. 2001. The rusty-spotted genets as a group with three species in Southern Africa (Carnivora: Viverridae). Pp. 65–80 *in* Denys, C., Granjon, L. & Poulet, A. (Eds.), *African Small Mammals.* IRD Editions, Paris.

Gaubert, P. 2003. Description of a new species of genet (Carnivora; Viverridae; genus *Genetta*) and taxonomic revision of forest forms related to the Large-spotted Genet complex. *Mammalia*, **67**(1): 85–108.

Gaubert, P., Tranier, M., Veron, G., Koch, D., Dunham, A.E., Taylor, P.J., Stuart, C., Stuart, T. & Wozencraft, C.W. 2003. Nomenclatural comments on the Rusty-spotted Genet (Carnivora, Viverridae) and designation of a neotype. *Zootaxa*, **160**: 1–14.

Mayr, E. 1969. *Principles of Systematic Zoology.* McGraw-Hill, New York.

Roberts, A. 1951. *The mammals of South Africa.* Trustees of 'The mammals of South Africa' book fund, Johannesburg.

Schlawe, L. 1980. Zur geographischen Verbreitung der Ginsterkatzen, Gattung *Genetta* G. Cuvier, 1816 (Mammalia, Carnivora, Viverridae). *Faunistische Abhandlungen Staatliches Museum für Tierkunde in Dresden*, **7**(15): 147–161.